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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,940	12/13/2001	Katsuhito Kitahara	P6397a	3867

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EPSON RESEARCH AND DEVELOPMENT INC
INTELLECTUAL PROPERTY DEPT
150 RIVER OAKS PARKWAY, SUITE 225
SAN JOSE, CA 95134

EXAMINER	
KANG, ROBERT N	
ART UNIT	**PAPER NUMBER**
2625	

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/016,940	KITAHARA ET AL.	
	Examiner	Art Unit	
	Robert N. Kang	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-17 and 19-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10-17 and 19-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *6/20/2006* .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. The arguments stated by Applicant in telephonic interviews (see interview summary) are persuasive and thus the previous rejection in view of Hamzy, as well as the finality of the action, has been withdrawn. The new grounds of rejection are detailed below.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 19 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Carrier waves are non-statutory.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-2, 4, 6, 8, 10-11, 13, 15, 17, and 20-23 are rejected under 35 U.S.C. 102(a) as being anticipated by Star Micronics.

Star Micronics Logo Store Driver (reference W, found in the "documentation" folder of the extracted executable file listed in reference V) functions with the TSP800 printer, as disclosed in reference V under "supported printers." The TSP800, found on the last page of reference U, was released on 12/31/2000, almost a full year before the foreign priority date of the applicant's invention.

Reference V states on page 1, paragraph 1, "Star Micronics printer models... TSP800... feature Logo Storage and Printing capabilities. Logo graphics are stored into the printer's flash-ROM for printing at a later point. The primary motivation behind the use of Logo storage within the printer is to generate highly graphical receipt while sending only a small amount of data. The result of sending only a small amount of data is increased receipt throughput."

Reference V discloses on page 5 the procedure for creating said logo or logos for storage. Thus the invention includes "a step for creating the print data."

Because the printer driver is responsible for sending the logo data to the flash (non-volatile) ROM residing in the printer, it must use printer recognizable instructions to achieve this end. Thus, the driver includes a "step for creating a command data set for storing the print data in the non-volatile storage in the target printer."

Because both the instruction and the logo data is sent to the printer the driver inherently creates "a data storage file containing both the print data and the command data set," wherein the "file" is the total transmission during the logo store driver execution.

Obviously, since the logo and commands are sent to the printer, the Star Micronics system includes a "file output step for storing the data storage file in a data storage medium readable by a host device, or for sending the data storage file to the host device via a communication path," in this case, parallel, wireless, or USB.

Upon receiving the "command data set" and the logo, the processor of the printer interprets the operation codes of the instructions and executes them. Thus, the "print data is stored in non-volatile storage in the target printer in accordance with the command data set upon the host device reading the data storage file." Thus the features of claims 1, 10, and 20 are anticipated.

Regarding claims 2, 11, and 21, a printer driver functions by translating high level instructions such as from a GUI or high level programming language into low level machine readable code or a specific high level printer control language. Thus in either scenario, the storage command must be sent as part of the "command data set" and is executed by the processor of the target printer. Thus "the command data set includes a data storage command set, executable by the target printer, for storing the print data in the non-volatile storage of the target printer."

Regarding claims 4, 13, and 22, because the printer driver is transferred during a test print command as disclosed in page 5 of reference V, there is clearly a "data transmission command set, executable by the host device, for sending the data storage command set and the print data to the target printer."

Regarding claims 6 and 15, Reference V on page 5 discloses 4 communications methods, "serial, parallel, USB, and Ethernet" for the printer driver. The data transmission commands are different for each of these communications methods, since the protocol for each media differs greatly. Therefore, the driver's "data transmission command set comprises communication parameters for connecting the host device with the target printer."

With regards to claims 8, 17, and 23, Reference V on page 4, item 5, states, "choose the port to which the printer will be connected and click Next." This comprises "an executable command set which, when run by the host device, enables inputting the communication parameters including communication settings, and enables setting the communication settings for sending the data storage command set to the target printer based on the input communication parameters."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3, 5, 12, 14, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Star Micronics.

The Star Micronics Logo Store driver meets the requirements of claims 1 and 10, upon which claims [3, 5] and [12, 14] respectively depend.

The Logo Store driver does not explicitly disclose "the command data set includes a command set, executable by the host device, for creating a data storage command set for storing the print data in the non-volatile storage of the target printer."

Self-installing programs were well-known at the time of invention to those of normal skill in the art (official notice).

Therefore, it would have been obvious at the time of invention to one of normal skill in the art to include the entire routine of pages 4 and 5 of reference V in a single, automatic executable file. This file, when accessed by a host device, would then create the machine-readable (executable by the printer) instructions for a specific printer for storing the logo to the non-volatile memory.

The motivation of this modification, like the motivation of all automatic setup programs, is to remove the required user interaction with the program so that the probability of error due to incorrect user instruction is significantly reduced.

Thus it would have been obvious to include the Logo Store Driver routine in a single automatic executable as commonly known in the art to obtain the invention as disclosed in claims 3, 12, 25, and 26.

Regarding claims 5 and 14, because the printer driver is transferred during a test print command as disclosed in page 5 of reference V, there is clearly a "data

transmission command set, executable by the host device, for sending the data storage command set and the print data to the target printer."

5. Claims 7, 16, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Star Micronics.

The Logo Store driver meets the requirements of claims 6, 15, and 22, upon which claims 7, 16, and 24 respectively depend.

Star Micronics does not expressly disclose "an executable command set which, when run by the host device, detects the communication parameters, and sends the data storage command set and print data to the target printer according to the detected communication parameters."

Automatic detection of peripheral parameters (i.e., plug and play or PnP) was a well-known concept and in widely used in the industry at the time of invention (official notice).

Therefore, it would have been obvious at the time of invention to one of normal skill in the art to include an "automatic setup" feature in the Logo Store driver in order to automatically detect the communications port and parameters for the printer attached to the host device.

The motivation of this modification would be, as with all plug and play devices, to reduce the complexity and probability of error in the setup of peripheral devices.

Thus it would have been obvious to combine the Logo Store driver with a PnP detection routine as commonly known in the art to obtain the invention as disclosed in claims 7, 16, and 24.

Conclusion

6. This action is NON-FINAL.

Examiner would like to inform the applicant that art unit 2622 has been re-designated as art unit 2625 due to organizational restructuring with the Patent & Trademark Office.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert N. Kang whose telephone number is 571-272-0593. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RNK

Twyler M. Lamb
Supervisory Patent Examiner